

4.1 Regional Priorities and Targeted Projects

Water Quality Priorities

Priority water quality issues in the Region are nutrient and sediment discharges to surface waters, NO₃ in groundwater, MTBE, acid mine drainage, and reuse of wastewater. Priorities for FY 04-05 as first described in the Executive Summary of this document are reiterated below. Priorities are determined from the need to protect, restore, or enhance water quality. They can be mandated by the Regional Board, legislation, statute, regulation, State Board, Cal-EPA, or USEPA. These are not necessarily arranged in priority order; however, TMDL-related work is considered a high statewide priority. These priorities are further highlighted in the watershed and region-wide sections of this document as appropriate. Grant funding may aid in addressing some of these priorities, at least in part.

Regionwide

Improve knowledge of ambient water quality– focus on Martis Creek and Mojave River

Clean Water Act 303d list update- Impaired waters need to be identified.

Caltrans NPDES Storm Water Control Program, Projects and Enforcement -Caltrans' large construction projects, ongoing maintenance activities, and snow and ice control methods have significant adverse effects on water quality regionwide. Coordinate, oversee and enforce as necessary to ensure implementation of NPDES Permit and programmatic requirements. Review statewide permit renewal.

Aquatic Pesticides Basin Plan Amendments - The Basin Plan, in effect, prohibits the use of aquatic pesticides in waters of the Region (with certain exceptions). The SWRCB has adopted two statewide General Permits that authorize use of aquatic pesticides in a manner that currently conflicts with certain Basin Plan objectives. Prepare Basin Plan amendments to authorize uses of aquatic pesticides under specific circumstances, namely to control vectors and aquatic weeds.

Timber Waiver Policy - Review timber harvest plans. Ensure compliance with waiver policy. Select high priority timber harvests for inspection and monitoring to ensure conditions are implemented.

Basin Plan Amendments - Assigned beneficial uses for various water bodies may not exist or be attainable. Prepare use attainability analyses to determine appropriate beneficial uses for the water bodies in question and propose changes in beneficial use designations if appropriate.

Financial Assurance Documents (FADs) – Ensure that FADs for all applicable facilities are current and sufficient. Track FADs' annual submittals for adequacy and completeness.

Grazing - Assess/inventory grazing allotments in 303 (d) listed watersheds (for nutrients or sediments). Develop strategy for addressing sites with greatest impacts to water quality. Consider waivers or general permits for regulation. Pursue enforcement actions for sites with past history of violations.

Memorandums of Understanding (TRPA/LRWQCB MOU, County /LRWQCB Septic MOU,USFS/LRWQCB MOU)- Ensure that MOUs are being adhered to such that water quality is being protected. Ensure appropriate control measures are being implemented when water quality problems are identified.

Water Recycling: Develop regionwide or discharger specific water recycling permit.

Dairies: Develop regionwide dairy regulation strategy.

Compliance Assessment of Prioritizing Enforcement : Develop a clear and consistent process to identify significant potential enforcement cases.

Ground Water Monitoring: Complete comprehensive review of current ground water monitoring data and locations to determine adequacy for detecting ground water impacts from discharges.

Northern Watersheds

Allied Petroleum Spill and Leak Cleanup/Susan River Watershed- Municipal drinking water wells are threatened. Continue investigation and cleanup efforts.

Lake Tahoe Water Quality and Nonpoint Pollution Prevention Studies & TMDL/Lake Tahoe Watershed- Loss of pelagic and near shore famed clarity; specific causes have not been fully characterized. Issues include complex source analysis and implementation planning. Data from water quality and NPS pollution prevention studies is crucial for development the Lake Tahoe TMDL . Nutrient and sediment TMDL is being developed in conjunction with the bi-state interagency effort (Pathway 2007). Agencies involved include Nevada, Tahoe Regional Planning Agency and U.S. Forest Service. Maximize pollutant load reductions from watershed restoration and stormwater treatment/erosion control projects.

Municipal Stormwater Permit Updates/Lake Tahoe Watershed- Municipal stormwater permit for Lake Tahoe Basin. Significant effort required to get stormwater management plans from local governments and prepare jurisdictions for TMDL implementation requirements.

Tahoe Tom's Gas Station Cleanup/ Lake Tahoe Watershed- Contaminated soil and groundwater threaten numerous drinking water wells

Meyers Beacon Gas Station Cleanup/ Lake Tahoe Watershed- Drinking water wells threatened and/or impacted. Continue cleanup efforts.

Shorezone Issues-401 WQC for private piers and Basin Plan Amendments/Lake Tahoe Watershed- Based on an assessment of potential impacts to water quality, the RB may choose to prepare a Basin Plan amendment to lift the prohibition on new pier development in spawning areas. Pollutants include exhaust components from motorized watercraft and pollutants associated with the construction of piers including the re-suspension of nutrients and bottom sediments.

Squaw Creek TMDL/ Truckee River Watershed - Complete TMDL and continue work on implementation to reduce sediment loading.

Truckee River TMDL, Construction/Stormwater Issues / Truckee River Watershed- Increases in sedimentation threaten to violate water quality standards. Significant urbanization, subdivision, and roadway development in the watershed threatens to increase sediment loads and other pollutants in stormwater. Complete impairment verification studies. To reduce sediment loading, continue to regulate activities and discharges through a combination of CEQA review, NPDES stormwater permits, 401 WQC and waivers. Continue to work with other partners such as the Town of Truckee, Placer County, and the local watershed group to improve mitigation and water quality monitoring as part of project development.

Leviathan Mine/Carson River Watershed- Acidic mine drainage to creeks. State owns property; Superfund site; 303(d) listed waters. Continue treatment and stabilization efforts.

Colorado Hill Mining District and Other Abandoned Mines, Alpine County/Carson River Watershed- Past mining activities and mine waste disposal resulted in ground and surface water pollution at many sites that is affecting water quality and beneficial uses. USFS is implementing treatment and cleanup activities requiring Regional Board review.

Southern Watersheds

Molycorp/ Ivanpah and Shadow Valley Watersheds- Past mine waste disposal resulted in ground water pollution at many sites. Constituents including TDS and NO₃ have migrated offsite and affected water quality. Continue to work with local, state and federal agencies on ground water investigations and corrective action plans.

PG&E Hinkley/ Mojave River Watershed - Hexavalent chromium and total chromium ground water plume exists at the site. Monitor ongoing remedial actions.

Searles Valley Minerals/ Searles Lake Watershed- Continue cleanup of past disposal sites and implement controls on permitted dischargers to address wildlife impacts from discharges at three facilities.

Los Angeles County SD #14 –Lancaster/ Antelope Valley Watershed-Monitor discharger actions to reduce adverse impacts to Edwards Air Force Base operations and develop requirements for new disposal options . Use Basin Plan amendment process to prescribe site-specific objectives for Paiute Ponds.

Los Angeles County SD #20 –Palmdale/ Antelope Valley Watershed- Pollution and degradation of ground water by NO₃ and TDS. Continue to monitor discharger’s actions to reduce impact of discharge on groundwater and remedial measures.

High Priority Projects, Activities, or Needs Identified for Specific Current Grant Programs

The following projects, activities, or needs have been identified as high priorities for current grant programs and fulfill one or more of water quality priorities (Note: an “X” indicates the potential watershed location for a project, activity or need. If both watershed(s) and “regionwide” have an “X”, the project/activity/need exists generally regionwide and specific projects have been identified in the indicated watershed.):

Agriculture grants: Agricultural Water Quality Grant Program (AWQGP) and Clean Water Act Section 319(h) Funds

Project/Activity/Needs Type and Description	Watersheds										
	Susan River/Eagle Lake	Truckee River	Lake Tahoe	E.&W Fork Carson Rivers	E.&W. Walker Rivers	Owens River/Mono Lake	Antelope	Mojave	Other Northern Region	Other Southern Region	Region-wide
Agriculture Monitoring Projects (Prop 40)											
Quantify & Characterize existing Agriculture MM											X
Investigate toxicity from Agriculture loading	X										
Quantify & Characterize Sediment loading											X
Quantify & Characterize Nitrogen loading								X			X
Quantify & Characterize Irrigation Practices								X			X
Quantify & Characterize Pesticide Application Rates											X
Quantify & Characterize salt loading								X			X

Project/Activity/Needs Type and Description	Susan River/Eagle Lake	Truckee River	Lake Tahoe	E.&W Fork Carson Rivers	E.&W. Walker Rivers	Owens River/Mono Lake	Antelope	Mojave	Other Northern Region	Other Southern Region	Region-wide
Implementation Projects (Prop 50 & CWA 319)											
Implement TMDLs & projects supporting TMDLs	X	X	X	X	X	X			X		
Implement Erosion and Sediment Control Management Measures*											X
Implement agricultural buffer MPs*											X
Implement Nutrient Management Measures*											X
Implement Pesticide Management Measures*											X
Implement Integrated Pest Management Practices*											X
Implement Irrigation Management Measures*											X
Implement salt loading control measures											X
Implement Water Conservation Management Measures*											X
Protection & enhancement of wildlife habitat											X
Develop non-point pollution control strategies (319)											X
Conduct activities to increase public awareness of nonpoint source pollution and the related solutions available											X

*See the web sites below for more details on Agriculture Management Measures.

<http://www.epa.gov/owow/nps/MMGI/Chapter2/index.html>

<http://www.nrcs.usda.gov/technical/ECS/agronomy/core4.pdf>

Water management grants: Proposition 50, Chapter 8, Integrated Regional Water Management Program (IRWMP) <http://www.swrcb.ca.gov/funding/irwmpg/index.html>

Project/Activity/Needs Type and Description	Susan River/Eagle Lake	Truckee River	Lake Tahoe	E.&W Fork Carson Rivers	E.&W. Walker Rivers	Owens River/Mono Lake	Antelope	Mojave	Other	Region-wide
Develop Integrated Water Management (IRWM) Plans; Incorporate key IRWM standards into existing watershed plans or develop addendums	X	X	X	X	X	X	X	X		X
Implement TMDLs for water quality improvement, and maintenance or restoration of beneficial uses	X	X	X	X	X					X
Implement habitat preservation or restoration projects to ensure support of identified beneficial uses										X

Potential Projects, Activities, or Needs to Meet Board Priorities or Otherwise Improve Water Quality

Listed below are activities, projects, or needs which staff, or stakeholders, see as ways to improve water quality and beneficial uses in the various watersheds (or region-wide). Funding may be available from a large variety of state and federal agencies as well as private groups. Consulting the California Watershed Funding Database at <http://calwatershedfunds.org/> may be helpful.

Long-term, cumulative list of potential grant projects

Project/Activity/Needs Type and Description	Susan River/Eagle	Truckee River	Lake Tahoe	E.&W Fork Carson Rivers	E.&W. Walker Rivers	Owens River/Mono	Antelope	Mojave	Other	Region-wide
<i>Implement BMPs/Improve Water Quality</i>										
Implement septic corrective measures	X			X	X					
Implement Erosion & Sediment Control Management Measures (natural/non-structural) to reduce erosion		X	X	X	X	X				X
Implement urban runoff reduction BMPs		X	X					X		X
Manage urban runoff		X	X					X		X
Implement Nutrient Management Measures								X		X
Implement TMDLs & projects supporting TMDLs	X	X	X	X	X					
Implement Irrigation Management Measures	X			X	X	X	X	X		X
Restore river channels and habitat following impacts from mining										X
Restoration impaired riparian and aquatic habitats	X	X	X	X	X	X		X		X
Enhance the water's beneficial and recreational uses										X
<i>Assess loadings and impacts</i>										
Evaluate impacts from large-scale development and integration of sustainable land uses and landscape designs		X	X			X	X	X		
Identify conflicts between water supply and water quality	X	X			X	X	X	X		
Investigate loading contributions from residential and urban activities		X	X				X			
<i>Research-oriented studies</i>										
Study effectiveness of non-structural BMPs (public outreach)										X
Evaluate design and performance standards for implementation of storm water BMPs										X

Project/Activity/Needs Type and Description	Susan River/Eagle	Truckee River	Lake Tahoe	E.&W Fork Carson Rivers	E.&W. Walker Rivers	Owens River/Mono	Antelope	Mojave	Other	Region-wide
Analyze storm water quality data and trends from various industrial sectors (e.g. metal yards, waste management facilities, etc.)										X
Develop nonpoint pollution control strategies										X
<i>Water Conservation and Management</i>										
Mitigate groundwater overdraft						X	X	X		
Investigate nitrogen and salt loading contributions to ground and surface water)							X	X		
Demonstrate water reuse projects to lower demand on supply						X	X	X		
<i>Monitoring</i>										
Implement a watershed wide monitoring program		X	X					X		X
Implement biological & toxicity monitoring	X	X	X		X	X				X
Implement citizen monitoring		X	X	X	X		X	X		X
<i>Education and Outreach</i>										
Conduct activities to increase public awareness of nonpoint source pollution and the related solutions available										X
Implement watershed education and outreach										X
<i>Watershed Planning</i>										
Incorporate key Integrated Regional Water Management (IRWM) standards into existing watershed plans or develop addendums										X
Finalize IRWM Plans										X

Since many funding sources are now requiring proposed projects be consistent with watershed management, restoration, or other plans for the watershed (otherwise collectively identified here as “Watershed Restoration Action Strategies”), the table below lists some in the Lahontan Region.

Watershed Restoration Action Strategies in the Lahontan Region

Watershed or Watershed Management Area	Watershed Restoration Action Strategies or Equivalent Documents (in process, draft, or final)
Susan River/Eagle Lake	Eagle Lake and Pine Creek CRMP Honey Lake Wetlands Mitigation Plan
Truckee River	Coordinated Watershed Management Strategy for the Middle Truckee River
Lake Tahoe	Lake Tahoe Environmental Improvement Program Upper Truckee River Plan
East and West Fork Carson Rivers	Upper Carson River Watershed Stream Corridor Condition Assessment June 2004 Indian Creek Reservoir TMDL (Basin Plan Amendment) USFS Final Recovery Plan for Paiute Cutthroat Trout
East and West Walker Rivers	Mono County’s West Walker River Watershed Plan (in process)
Owens River/Mono Lake	Mono County’s Mono –Owens Watershed Plan (in process) Lower Owens River Project Final EIR June 2004 (LADWP)
Antelope	
Mojave	Draft EIR for the Mojave Water Agency Regional Water Management Plan (Sept 2004)
Other	
Regionwide	California Regional Water Quality Control Board, Lahontan Region. <i>Watershed Management Initiative Chapter</i> , 2005. California Regional Water Quality Control Board, Lahontan Region Adopted TMDLs.